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Retrospectives
Eugenics and Economics in the Progressive Era

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This feature addresses the history of economic terms and ideas. The hope is to deepen the workaday dialogue of economists, while perhaps also casting new light on ongoing questions. If you have suggestions for future topics or authors, please write to Joseph Persky, c/o *Journal of Economic Perspectives,* Department of Economics (M/C 144), University of Illinois at Chicago, 601 South Morgan Street, Room 2103, Chicago, Illinois 60607-7121.

Introduction

American economics transformed itself during the Progressive Era. In the three to four decades after 1890, American economics became an expert policy science and academic economists played a leading role in bringing about a vastly more expansive state role in the American economy. By World War I, the U.S. government amended the Constitution to institute a personal income tax, created the Federal Reserve, applied antitrust laws, restricted immigration and began regulation of food and drug safety. State governments, where the reform impulse was stronger still, regulated working conditions, banned child labor, instituted "mothers' pensions," capped working hours and set minimum wages.

Less well known is that a crude eugenic sorting of groups into deserving and undeserving classes crucially informed the labor and immigration reform that is the hallmark of the Progressive Era (Leonard, 2003). Reform-minded economists of the Progressive Era defended exclusionary labor and immigration legislation on

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grounds that the labor force should be rid of unfit workers, whom they labeled "parasites," "the unemployable," "low-wage races" and the "industrial residuum." Removing the unfit, went the argument, would uplift superior, deserving workers.

"Eugenics" describes a movement to improve human heredity by the social control of human breeding, based on the assumption that differences in human intelligence, character and temperament are largely due to differences in heredity (Paul, 2001). Francis Galton, statistical innovator and half-cousin of Charles Darwin, is regarded as the founder of modern eugenics. Eugenics' "first object," said Galton (1908, p. 323), "is to check the birth rate of the unfit instead of allowing them to come into being . . . the second object is the improvement of the race by furthering the productivity of the fit by early marriages and the healthful rearing of children."

In the United States especially, Progressive Era eugenics tended to be racist. But "race" had connotations in the Progressive Era different than those of today, and eugenicists of that time were both imprecise and inconsistent in their use of the term. Sometimes the term refers to all of humankind—the human race. Sometimes "race" was used in something like its modern sense. But more commonly, the Progressive Era usage of "race" meant ethnicity or nationality, especially when distinguishing among Europeans, so that the English, or those of Anglo-Saxon ethnicity, were presumed to be a race distinct from, say, the Irish race or the Italian race. The most influential racial taxonomy of the day, *The Races of Europe*, was written by William Z. Ripley (1899), an economist trained at MIT and Columbia, who spent a long career at Harvard studying railroad economics and served, in 1933, as president of the American Economic Association (AEA).[1]

Race did not exhaust the variants of human hierarchy embraced by American eugenicists, whose catalogue of unfit persons often included women and the lower classes. Eugenicists were also gravely concerned with those they regarded as deficient in intellect—for example, epileptics, the mentally ill and the "feeble-minded"—and those they regarded as deficient in character—"the criminals and the incorrigibly idle . . . [the] morally deficient . . . and [those] incapable of producing their maintenance at any application whatsoever" (Webb and Webb 1920 [1897], p. 785).

During the Progressive Era, eugenic approaches to social and economic reform were popular, respectable and widespread. This essay documents the influence of eugenic ideas upon American economic reform, especially in the areas of immigration and labor reform, and tries to illuminate something of its causes and consequences. Though our focus is upon economics, eugenics appealed no less, and arguably more, to scholars in the other emerging sciences of society, especially

[1] Racism is neither necessary nor sufficient for eugenics. The Swedish eugenicists of the mid-twentieth century, for example, disavowed racism. Also, some with racist views were skeptical of the idea that the social control of human breeding would be carried out by wise, humane governments.

sociology and psychology. A fuller treatment is available in Leonard (2003), upon which this essay draws.

Immigration and "Race Suicide"

It was a scholarly fashion, circa 1890, to declare the U.S. frontier "closed" and to sound a Malthusian alarm about excess American population growth. But the professional economists who wrote on immigration increasingly emphasized not the quantity of immigrants, but their quality. "If we could leave out of account the question of race and eugenics," Irving Fisher (1921, pp. 226–227) said in his presidential address to the Eugenics Research Association, "I should, as an economist, be inclined to the view that unrestricted immigration . . . is economically advantageous to the country as a whole . . . ." But, cautioned Fisher, "the core of the problem of immigration is . . . one of race and eugenics," the problem of the Anglo-Saxon racial stock being overwhelmed by racially inferior "defectives, delinquents and dependents."

Fear and dislike of immigrants certainly were not new in the Progressive Era. But leading professional economists were among the first to provide scientific respectability for immigration restriction on racial grounds.[2] They justified race-based immigration restriction as a remedy for "race suicide," a Progressive Era term for the process by which racially superior stock ("natives") is outbred by a more prolific, but racially inferior stock (immigrants). The term "race suicide" is often attributed to Edward A. Ross (1901a, p. 88), who believed that "the higher race quietly and unmurmuringly eliminates itself rather than endure individually the bitter competition it has failed to ward off by collective action." Ross was no outlier. He was a founding member of the American Economic Association, a pioneering sociologist and a leading public intellectual who boasted that his books sold in the hundreds of thousands.[3] Ross's coinage gained enough currency to be used by Theodore Roosevelt (1907, p. 550), who called race suicide the "greatest problem of civilization," and regularly returned to the theme of "the elimination instead of the survival of the fittest." In that same year, more than 40 years after the American Civil War, Ross (1907, p. 715) wrote: "The theory that races are virtually equal in capacity leads to such monumental follies as lining the valleys of the South with the bones of half a million picked whites in order to improve the conditions of four million unpicked blacks."

[2] See, for example, Richmond Mayo-Smith (1888a, b, c) and Edward W. Bemis (1888).

[3] Edward Ross is remembered today principally as a martyr to academic freedom. Ross opposed the use of immigrant Chinese labor in building the railroads, which led to his ouster from Leland Stanford Jr. University in 1900. Ross's case galvanized fellow academics. The American Economic Association rallied to his side, which it had not done for other economists whose reformist politics made them unpopular with plutocratic university patrons.

Ross's (1901b) theory was that the "native" Anglo-Saxon stock was biologically well-adapted to rural, traditional life, but less well-suited to the new urban milieu of industrial capitalism. In his view, the racially inferior immigrant races, "Latins, Slavs, Asiatics, and Hebrews," were better adapted to the conditions of industrial capitalism and thus would outbreed the superior Anglo-Saxon race. The race-suicide proposition that persons of inferior stock outbreed their biological betters turns Darwinism on its head, since Darwinism *defines* fitness as relative reproductive success. Progressive Era eugenics, in contrast argued that fitness comprised attributes, such as race, that could be judged independently of reproductive success. Indeed, race-suicide theory was predicated on what Darwinism denies, what eugenicists called the "elimination of the fit."

By 1912, Simon Patten (p. 64), the reformist Wharton School economist who served as AEA president in 1908, could say, "[T]he cry of race suicide has replaced the old fear of overpopulation." In explaining why those of inferior stock were more prolific, early Progressive Era economists emphasized how economic life under industrial capitalism was increasingly dysgenic, that is, it tended to promote the survival of the *un*fit. Patten, for example, argued (as quoted in D. Ross, 1991, p. 197) that "every improvement . . . increases the amount of the deficiencies which the laboring classes may possess without their being thereby overcome in the struggle for subsistence that the survival of the ignorant brings upon society."

In response, Patten ultimately argued for the state taking over the task of selecting the fittest—eugenics. "Social progress is a higher law than equality," Patten (1899, pp. 302–303) volunteered, and the only way to progress was the "eradication of the vicious and inefficient." Frank Fetter (1899, p. 237), who was to serve as president of the AEA in 1912, also worried that "the benefits of social progress are being neutralized by race degeneration" owing to the "suspension of the selective process."

Henry Farnam, who cofounded the American Association for Labor Legislation (AALL), an influential reform organization led by academic economists, and later served as the AEA president in 1911, emphasized aid to the poor as a cause of dysgenic selection: "[W]e are," Farnam (1888, p. 295) proposed, "by means of our very improvements, setting forces in operation which tend to multiply the unfit." The increase in the unfit, Farnam concluded, "render[s] more and more imperative the solution of that exceedingly difficult problem which Mr. Arnold White calls 'sterilization of the unfit.'"

Ross, Patten, Fetter and Farnam all saw higher living standards and Progressive Era reforms less as a victory for social justice than as an impediment to Darwinian weeding out. Their response was not to argue against reform, as might a social Darwinist, but to advocate for eugenics, the substitution of state selection for natural selection of the fittest.

Francis Amasa Walker offered a race-suicide account that proved especially influential in the immigration debate. Walker was a decorated Civil War hero, served as president of MIT from 1881 to 1897, directed the U.S. Census in 1870 and

in 1880, served as the AEA's first president from 1886 to 1892 and was the most respected American economist at the beginning of the Progressive Era. Walker's race-suicide theory argued that immigration limited the natural fertility of the "native" population—by which he meant earlier European immigrants of Anglo-Saxon ethnicity—so that inferior foreign-born stock effectively displaced superior native stock. "The native element failed to maintain its previous rate of increase," says Walker (1899, p. 423), "because the foreigners came in such swarms."

Walker (1899, p. 424) proposed that native Americans would not compete with immigrants from the "low-wage races." "The American shrank from the industrial competition thrust upon him," Walker argued. "He was unwilling himself to engage with the lowest kind of day labor with these new elements of the population; he was even more unwilling to brings sons and daughters into the world to enter that competition." Walker (1896, p. 828) characterized the new elements of the population—"peasants" from "southern Italy, Hungary, Austria, and Russia"—as "beaten men from beaten races; representing the worst failures in the struggle for existence. Centuries are against them, as centuries were on the side of those who formerly came to us." Walker (1899, p. 447) predicted that, without racial immigration restriction, "every foul and stagnant pool of population in Europe, [in] which no breath of intellectual life has stirred for ages . . . [will] be decanted upon our shores."

Like Fisher, Ross, Patten, Fetter and Farnam, Walker endorsed eugenic policies. "We must strain out of the blood of the race more of the taint inherited from a bad and vicious past," Walker (1899, p. 469) proposed, "before we can eliminate poverty, much more pauperism, from our social life. The scientific treatment which is applied to physical diseases must be extended to mental and moral disease, and a wholesome surgery and cautery must be enforced by the whole power of the state for the good of all."[4]

Eugenics to one side, Walker was, for his time, a sophisticated student of population. Walker found that early nineteenth-century population forecasts for 1840 and 1850 assumed little immigration, but were nonetheless quite accurate. Noting that a relatively large increase in immigration had occurred during the 1830–1839 and 1840–1849 decades, Walker (1899, p. 422) concluded that the

[4] Race-suicide arguments were by no means confined to economics. Chicago sociologist Charles Henderson (1909, p. 232), who chaired the National Conference of Charities and Corrections, wrote: "[Mine] is not an argument against immigration," said Henderson, "but only against the immigration of persons who cannot be induced to demand a civilized scale of life." Claimed Henderson (1900, p. 253), when "[the unfit] are removed, the real workers will more easily rise in earning power." Henderson offered banishment to rural labor colonies for the "feebleminded and degenerate" who "are not very numerous, and can all be easily segregated in self-supporting rural colonies." But segregation was not dire enough for the "obviously unfit," who must, in the name of the greater good, be coercively sterilized. "It is clearly and distinctly the right of a commonwealth," argued Henderson (1909, pp. 228–229), "to deprive them of liberty and so prevent their propagation of defects and thus the perpetuation of their misery in their offspring. Therefore the policy of painless asexualization is offered. . . ."

unanticipated immigration must have *induced* a native decline in birth rate, otherwise the forecasts, in assuming little immigration, would have underestimated the total population. A few critics disagreed, saying that native fertility began declining well before immigration increased and that the causes lay in increased urbanization, higher living standards and later age of marriage (Goldenweiser, 1912). Those critics were ignored. Whatever the merits of Walker's case viewed from today, it is important to note that even sophisticated students of population embraced race-suicide theory and eugenic solutions to it.

Race-suicide theories were popular abroad as well. In England, for example, Fabian socialist Sidney Webb (1907, p. 17) devised a novel term, "adverse selection," to describe what he saw as English race suicide: "Twenty-five percent of our parents, as Professor Karl Pearson keeps warning us, is producing 50 percent of the next generation. This can hardly result in anything but national deterioration; or, as an alternative, in this country gradually falling to the Irish and the Jews."

In the latter half of the Progressive Era, race-suicide and proposed eugenic solutions had enough currency to appear in leading textbooks. In his *Elementary Principles,* Irving Fisher (1907, p. 715) declared that "if the vitality or vital capital is impaired by a breeding of the worst and a cessation of the breeding of the best, no greater calamity could be imagined." Fortunately, said Fisher, eugenics offered a means, "by isolation in public institutions and in some cases by surgical operation," to prevent the calamity of "inheritable taint." Similarly, Frank Fetter (1918, pp. 421–422) lamented in his *Economic Principles*, "Democracy and opportunity [are] increasing the mediocre and reducing the excellent strains of stock . . . . Progress is threatened unless social institutions can be so adjusted as to reverse this process of multiplying the poorest, and of extinguishing the most capable families." Eugenic policies would introduce, Fetter argued, "an element of rational direction into the process of perpetuating the race . . . ."

The Eugenic Effects of Minimum Wage Laws

During the second half of the Progressive Era, beginning roughly in 1908, progressive economists and their reform allies achieved many statutory victories, including state laws that regulated working conditions, banned child labor, instituted "mothers' pensions," capped working hours and, the *sine qua non*, fixed minimum wages. In using eugenics to justify exclusionary immigration legislation, the race-suicide theorists offered a model to economists advocating labor reforms, notably those affiliated with the American Association for Labor Legislation, the organization of academic economists that Orloff and Skocpol (1984, p. 726) call the "leading association of U.S. social reform advocates in the Progressive Era."

Progressive economists, like their neoclassical critics, believed that binding minimum wages would cause job losses. However, the progressive economists also believed that the job loss induced by minimum wages was a social benefit, as it

performed the eugenic service ridding the labor force of the "unemployable." Sidney and Beatrice Webb (1897 [1920], p. 785) put it plainly: "With regard to certain sections of the population [the "unemployable"], this unemployment is not a mark of social disease, but actually of social health." "[O]f all ways of dealing with these unfortunate parasites," Sidney Webb (1912, p. 992) opined in the *Journal of Political Economy,* "the most ruinous to the community is to allow them to unrestrainedly compete as wage earners." A minimum wage was seen to operate eugenically through two channels: by deterring prospective immigrants (Henderson, 1900) and also by removing from employment the "unemployable," who, thus identified, could be, for example, segregated in rural communities or sterilized.

The notion that minimum-wage induced disemployment is a social benefit distinguishes its progressive proponents from their neoclassical critics, such as Alfred Marshall (1897), Philip Wicksteed (1913), A. C. Pigou (1913) and John Bates Clark (1913), who regarded job loss as a social cost of minimum wages, not as a putative social benefit (Leonard, 2000).

Columbia's Henry Rogers Seager, a leading progressive economist who served as president of the AEA in 1922, provides an example. Worthy wage-earners, Seager (1913a, p. 12) argued, need protection from the "wearing competition of the casual worker and the drifter" and from the other "unemployable" who unfairly drag down the wages of more deserving workers (1913b, pp. 82–83). The minimum wage protects deserving workers from the competition of the unfit by making it illegal to work for less. Seager (1913a, p. 9) wrote: "The operation of the minimum wage requirement would merely extend the definition of defectives to embrace all individuals, who even after having received special training, remain incapable of adequate self-support." Seager (p. 10) made clear what should happen to those who, even after remedial training, could not earn the legal minimum: "If we are to maintain a race that is to be made of up of capable, efficient and independent individuals and family groups we must courageously cut off lines of heredity that have been proved to be undesirable by isolation or sterilization . . . ."

The unemployable were thus those workers who earned less than some measure of an adequate standard of living, a standard the British called a "decent maintenance" and Americans referred to as a "living wage." For labor reformers, firms that paid workers less than the living wage to which they were entitled were deemed parasitic, as were the workers who accepted such wages—on grounds that someone (charity, state, other members of the household) would need to make up the difference.

For progressives, a legal minimum wage had the useful property of sorting the unfit, who would lose their jobs, from the deserving workers, who would retain their jobs. Royal Meeker, a Princeton economist who served as Woodrow Wilson's U.S. Commissioner of Labor, opposed a proposal to subsidize the wages of poor workers for this reason. Meeker preferred a wage floor *because* it would disemploy unfit workers and thereby enable their culling from the work force. "It is much better to enact a minimum-wage law even if it deprives these unfortunates of work," argued

Meeker (1910, p. 554). "Better that the state should support the inefficient wholly and prevent the multiplication of the breed than subsidize incompetence and unthrift, enabling them to bring forth more of their kind." A. B. Wolfe (1917, p. 278), an American progressive economist who would later become president of the AEA in 1943, also argued for the eugenic virtues of removing from employment those who "are a burden on society."

In his *Principles of Economics*, Frank Taussig (1921, pp. 332–333) asked rhetorically, "how to deal with the unemployable?" Taussig identified two classes of unemployable worker, distinguishing the aged, infirm and disabled from the "feebleminded . . . those saturated with alcohol or tainted with hereditary disease . . . [and] the irretrievable criminals and tramps. . . ." The latter class, Taussig proposed, "should simply be stamped out." "We have not reached the stage," Taussig allowed, "where we can proceed to chloroform them once and for all; but at least they can be segregated, shut up in refuges and asylums, and prevented from propagating their kind."[5]

The progressive idea that the unemployable could not earn a living wage was bound up with the progressive view of wage determination. Unlike the economists who pioneered the still-novel marginal productivity theory, most progressives agreed that wages should be determined by the amount that was necessary to provide a reasonable standard of living, not by productivity, and that the cost of this entitlement should fall on firms.[6]

But how should a living wage be determined? Were workers with more dependents, and thus higher living expenses, thereby entitled to higher wages? Arguing that wages should be a matter of an appropriate standard of living opened the door, in this era of eugenics, to theories of wage determination that were grounded in biology, in particular to the idea that "low-wage races" were biologically predisposed to low wages, or "under-living."[7] Edward A. Ross (1936, p. 70), the proponent of race-suicide theory, argued that "the Coolie cannot outdo the American, but he can underlive him." "Native" workers have higher productivity, claimed Ross, but because Chinese immigrants are racially disposed to work for lower wages, they displace the native workers.

[5] Not all progressives endorsed eugenics, and not all of those who endorsed eugenics were progressives, traditionally defined, still less proponents of minimum wages. Taussig was not especially well-disposed to minimum wages, but his intemperate remarks measure the influence of eugenic ideas upon economics in the Progressive Era.

[6] As Lawrence Glickman (1997, pp. 85–91) argues, the progressive view of wage determination drew upon the labor union theory of the 1880s. Frank Foster of the American Federation of Labor, for example, argued (as quoted in Mussey, 1927, p. 236) that "it is not commonly the value of what is produced which chiefly determines the wage rate, but the nature and degree of the wants of the workers, as embodied in their customary mode of living." Likewise, the influential and pioneering labor reformer Carroll Wright (1882, pp. 4–5), one of the first Americans to call for a legal minimum wage, asserted that "[t]he labor question" is a matter of the "wants of the wage-laborer."

[7] Progressives also argued that there was a "female" standard of living, something that was determined by women's biological nature, or by their "natural" roles as mothers and helpmeets (Leonard, 2005).

In his *Races and Immigrants,* the University of Wisconsin economist and social reformer John R. Commons argued that wage competition not only lowers wages, it also selects for the unfit races. "The competition has no respect for the superior races," said Commons (1907, p. 151), "the race with lowest necessities displaces others." Because race rather than productivity determined living standards, Commons could populate his low-wage-races category with the industrious and lazy alike. African Americans were, for Commons (p. 136), "indolent and fickle," which explained why, Commons argued, slavery was required: "The negro could not possibly have found a place in American industry had he come as a free man . . . [I]f such races are to adopt that industrious life which is second nature to races of the temperate zones, it is only through some form of compulsion." Similarly, Wharton School reformer Scott Nearing (1915, p. 22), volunteered that if "an employer has a Scotchman working for him at $3 a day [and] an equally efficient Lithuanian offers to the same work for $2 . . . the work is given to the low bidder."

When U.S. labor reformers reported on labor legislation in countries more precocious with respect to labor reform, they favorably commented on the eugenic efficacy of minimum wages in excluding the "low-wage races" from work. Harvard's Arthur Holcombe (1912, p. 21), a member of the Massachusetts Minimum Wage Commission, referred approvingly to the intent of Australia's minimum wage law to "protect the white Australian's standard of living from the invidious competition of the colored races, particularly of the Chinese." Florence Kelley (1911, p. 304), perhaps the most influential U.S. labor reformer of the day, also endorsed the Australian minimum-wage law as "redeeming the sweated trades" by preventing the "unbridled competition" of the unemployable, the "women, children, and Chinese [who] were reducing all the employees to starvation . . ."

For these progressives, race determined the standard of living, and the standard of living determined the wage. Thus were immigration restriction and labor legislation, especially minimum wages, justified for their eugenic effects. Invidious distinction, whether founded on the putatively greater fertility of the unfit, or upon their putatively greater predisposition to low wages, lay at the heart of the reforms we today see as the hallmark of the Progressive Era.

The Popularity and Appeal of Eugenics

For modern readers, the Progressive Era relationship between American reform and the biology of human inheritance is doubly unexpected: first, that eugenics was so popular and respectable, and second, that so many progressive economists should have been attracted to eugenic explanations. Let us consider these surprises in turn.

The Popularity of Eugenics

"Eugenics" is a dirty word in contemporary discourse, largely because of its association with the eugenic atrocities of German National Socialism. Even profes-

sional historians find it difficult to resist the temptation to read all pre-Nazi history of eugenics as a prelude to Nazi crimes. But Progressive Era eugenics was, in fact, the broadest of churches. It was mainstream; it was popular to the point of faddishness; it was supported by leading figures in the newly emerging science of genetics; it appealed to an extraordinary range of political ideologies, not just progressives; and it survived the Nazis.

In 1928, 376 college courses were dedicated to the subject of eugenics (Allen, 1983, p. 116). A single text among many, *Searchlights on Health, the Science of Eugenics,* sold one million copies in the first two years of its publication (Proctor, 1991, p. 201, n. 28). The American Eugenics Society, co-founded by Irving Fisher to educate Americans on the virtues of eugenics, set up instructional pavilions and staged "fitter family" competitions at state agricultural fairs.

Progressive Era eugenic ideas were influential in nearly all non-Catholic western countries and in many others besides. We today have scholarly treatments of eugenics movements in Canada (McLaren, 1990), France (Schneider, 1990), Japan (Suzuki, 1975), Russia (Adams, 1990), Scandinavian countries (Broberg and Roll-Hansen, 1996), Romania (Bucur, 2002), Latin America (Stepan, 1991) and China (Dikötter, 1992). In 1933, Paul Popenoe, a founder of American demography and a leading eugenicist, could boast that eugenic sterilization laws obtained in jurisdictions comprising 150 million people (Kevles, 1995, p. 115). Eugenic sentiments can even be found among scholars from traditionally black colleges. Miller (1917) worried about the lower fertility of the Howard University professoriate—"the higher element of the negro race"—when compared with the average African American.

Eugenics found advocates whose ideologies spanned the entire political spectrum. The eugenics movement attracted some reactionaries and conservatives. Leading eugenicists, such as Francis Galton and Charles Davenport, director of the Eugenics Record Office at the Cold Spring Harbor Laboratory, can be described as social conservatives. But others, such as Karl Pearson, were socialists. Eugenics won many advocates on the left, such as birth control advocate Margaret Sanger, who began intellectual life as a radical anarchist. Fabian socialists such as Sidney Webb, George Bernard Shaw and H. G. Wells were eugenicists, as were Harold Laski and John Maynard Keynes (Paul, 1984). The Marxist economist Scott Nearing (1912) and the feminist economist Charlotte Perkins Gilman (1900) also embraced eugenics.

Many biologists were drawn to eugenics. For example, David Starr Jordan, president of Stanford, was a tireless advocate of the eugenic idea that "the blood of nation determines its history," as was Harvard geneticist and eugenicist E.M. East (Jordan, 1902, p. 1). In fact, Paul and Spencer (1995, p. 302) report that before the 1930s, Thomas Hunt Morgan, pioneer in fruit-fly studies and Nobel laureate in physiology and medicine in 1933, was the only geneticist to reject publicly the eugenicist idea that socially undesirable traits were the product of bad heredity.

Why Did Eugenics Appeal to the Progressives?

Eugenic ideas were not new in the Progressive Era, but they acquired new impetus with the Progressive Era advent of a more expansive government. In effect, the expansion of state power meant that it became possible to have not only eugenic thought, but also eugenic practice. As eugenics historian Diane Paul (1995, p. 6) writes, eugenics legislation had to await "the rise of the welfare state."

Progressives were drawn to eugenics by the same set of intellectual commitments that drew them to reform legislation. Paramount was the reform idea that laissez-faire was bankrupt. Sidney Webb (1910–1911, p. 237) said flatly, "[N]o consistent eugenicist can be a 'Laisser Faire' individualist unless he throws up the game in despair. He must interfere, interfere, interfere!" Similarly, Frank Fetter (1907, pp. 92–93) pronounced at the AEA meetings: "Unless effective means are found to check the degeneration of the race, the noontide of humanity's greatness is nigh, if not already passed. Our optimism must be based not upon *laissez-faire*," said Fetter, "but upon vigorous application of science, humanity, and legislative art to the solution of the problem."

Progressive opposition to laissez faire was motivated by a set of deep intellectual commitments regarding the relationship between social science, social scientific expertise and right governance. The progressives were committed to 1) the explanatory power of scientific (especially statistical) social inquiry to get at the root causes of social and economic problems; 2) the legitimacy of social control, which derives from a holist conception of society as prior to and greater than the sum of its constituent individuals; 3) the efficacy of social control via expert management of public administration; where 4) expertise is both sufficient and necessary for the task of wise public administration.

It is no accident that so many notable eugenicists were pioneers in statistics. Francis Galton, Karl Pearson and Ronald A. Fisher were all founders of modern statistics and were, in addition, leading lights in the eugenics movement. Many proponents of eugenics in economics were also statistically oriented. Francis Amasa Walker, Richmond Mayo-Smith, Irving Fisher and Walter Wilcox were all statisticians, by training and/or by inclination. They regarded statistical measurement and inference as the method that put the "science" in social science.

Karl Pearson's (1909, pp. 19–20) "bricks for the foundations" of eugenics emphasized statistical methods as the guarantor of better social science: "[first] we depart from the old sociology, in that we desert verbal discussion for statistical facts, and [second] we apply new methods of statistics which form practically a new calculus." American progressives also saw statistics as providing a scientific foundation for their legislative reforms. Said reformer Lester Ward (1915, p. 46): "if laws of social events could be statistically formulated, they could be used for scientific lawmaking."

The progressives also believed strongly in the legitimacy of "social control," a catch phrase of Progressive Era reformers, as it was for their successors, the Institutionalists. "Social control" did not refer narrowly to state regulation of

markets. Edward A. Ross (1901b), who popularized the term, employed it in a broader sociological sense, to describe the various ways in which society "can mold the individual to the necessity of the group," which, in the context of his eugenics, meant a "program for survival" of the Anglo-Saxon race (as quoted in Furner, 1975, p. 309).

The legitimacy of social control meant, in practice, the legitimacy of state control. For progressives, the legitimacy of state control derived from their conception of the state as an entity prior to and greater than the sum of its constituent individuals, a conception that opposed the traditional liberal emphasis on individual freedom and the liberal view that the state's legitimacy derives solely from the consent of its individual creators. Lester Ward devised the term "sociocracy" to describe the "scientific control of the social forces by the collective mind of society" (Fine, 1956, p. 263).

The progressives' somewhat antidemocratic impulses also led them to believe that academic experts were both sufficient and necessary for the task of wise public administration, because they could and would suspend their own interests to transcend the messy business of democratic politics. As one widely read eugenics text put it: "[G]overnment and social control are in the hands of expert politicians who have power, instead of expert technologists who have wisdom. There should be technologists in control of every field of human need and desire" (as quoted from Albert Wiggam's *New Decalogue* 1923, in Ludmerer, 1972, pp. 16–17). The case for technocratic governance was put baldly by Irving Fisher (1907, p. 20): "The world consists of two classes—the educated and the ignorant—and it is essential for progress that the former should be allowed to dominate the latter. . . . [O]nce we admit that it is proper for the instructed classes to give tuition to the uninstructed, we begin to see an almost boundless vista for possible human betterment." Thus were eugenics and progressivism complementary rather than antagonistic trends in the United States during the Progressive Era (Searle, 1998, pp. 25–26).

It is a temptation to regard progressive thought of a century ago as akin to contemporary progressivism, but Progressive Era progressives viewed the poor and disenfranchised with great ambivalence. Many clearly believed that defective heredity offered a basis for sorting the worthy poor from the unworthy poor and that uplift of the worthy poor required eugenic control of the unworthy poor. Consider Popenoe and Johnson's very successful *Applied Eugenics* (1918), published as part of the Social Science textbook series edited by Richard T. Ely. Popenoe and Johnson argued for legislation that would abolish child labor and provide education for all children, quintessentially progressive policies. But compulsory education and child labor bans, for Popenoe and Johnson, were desirable because the unfit poor would be unable to put their children to work and thus would have fewer children, a eugenic goal. Indeed, Popenoe and Johnson opposed free school lunches and textbooks for the poor on the grounds that subsidies of books and lunches would lower the cost of child rearing and thereby increase the number of children born to the unfit.

Similarly, Emily Greene Balch, a Wellesley College economist and future winner of the Nobel Peace Prize in 1946 for her role as a peace activist, made the eugenic case against subsidies for poor school children. "If you simply want to have more people . . . depraved people quite as well as any other class," said Balch (1907, p. 102), then "feeding school children [is] a good thing; but if you believe it is important . . . to have more of the right kind of people, then any measure of encouragement should be most carefully selective in character." That progressives could oppose subsidies for poor schoolchildren reveals the extent to which eugenics informed American Progressive Era reform.

What Happened to Progressive Era Eugenics?

American eugenics went into decline in the 1930s, increasingly burdened by its political, demographic and scientific liabilities. Politically, the close association of eugenic ideas with the Nazi regime increasingly discredited American eugenic policies, and the newly powerful Catholic Church also opposed eugenics, both because Church doctrine forbade interference with conception and because many American Catholics belonged to groups the eugenicists considered unfit. But the Progressive Era vogue for eugenics was also undone by demographic and scientific developments.

Demographically, American eugenics lost impetus from its own handiwork—the race-based immigration quotas of the 1920s—and from the subsequent Depression-Era decline in fertility. Already stalled by World War I, the immigration of the eastern and southern European peoples eugenicists deemed racially inferior was effectively terminated by eugenics-inspired immigration restrictions, notably the Emergency Quota Act of 1921 and the Immigration Act of 1924. The Immigration Act's quotas reduced immigration from southern and eastern Europe, which averaged 730,000 per year (Goldin, 1994, p. 239) in the decade before World War I (1905–1914), to a mere 20,000 persons per year. And when, in the 1930s, when American birth rates dipped below replacement level, shrinking population seemed a greater economic threat than differential fertility.

Scientifically, developments in genetics increasingly made American eugenics' preferred method—the development of elaborate family pedigrees—an untenable empirical foundation for eugenic goals. Eugenic scientists, such as geneticist Charles Davenport of the Eugenics Record Office, built hundreds of pedigrees on the view that inherited traits followed a simple Mendelian logic, that is, that all human traits were determined by a pair of genes, one from each parent. Traits, whether dominant (expressed when either or both parents carried a dominant gene) or recessive (expressed when both parents carried a recessive gene) could be mapped with information about the family tree and with accurate "scoring" of family members for the presence or absence of the trait.

The single-trait-single-gene-pair template held good for traits, such as

Huntington's disease (dominant) or albinism (recessive), which are readily scored and are, in fact, caused by a mutation in a single gene. But Progressive Era eugenicists were routinely imprecise in their definition of a trait—"feeblemindedness," for example, covered a whole range of mental disabilities, whose genetic basis, when it existed, could obviously differ across persons. Other traits eugenicists researched, such as "shiftlessness," were fanciful, and still others, such as intelligence or artistic ability, were quite complex, making their "scoring" a difficult problem. (It also gave rise to the intelligence testing industry.) Pedigrees also show only that certain human characteristics run in families; they cannot establish genetic cause. But eugenic scientists ordinarily ignored nonhereditarian causes—to the point that Davenport purported to find a genetic basis for "thalassophilia," or love of the sea (Kevles, 1995, p. 49). Finally, pedigrees are of little help for polygenic traits, traits that are determined by the complex interaction of large numbers of genes.

These scientific shortcomings—poorly defined, fanciful and complex traits, the unwillingness to address environmental and polygenic causes—gradually persuaded American geneticists, led by Thomas Hunt Morgan, to distance themselves from the eugenic organizations they once embraced. Geneticist Herbert Jennings resigned from the American Eugenics Society in 1925, a year after writing to Irving Fisher that eugenics societies were no place for men of science. Geneticist Raymond Pearl (1927), an early eugenic enthusiast, distanced genetics from eugenics in H. L. Mencken's *American Mercury,* an apostasy that caused the withdrawal of a job offer from Harvard.

However, the slow retreat of geneticists from eugenics organizations was not a repudiation of eugenics per se. If critics among geneticists, such as Ronald A. Fisher and Hermann Muller, increasingly rejected the science behind Progressive Era eugenics, they did not reject the eugenic ideal. On the contrary, Muller, for example, imagined that a more sophisticated genetics would place eugenics upon a firmer scientific foundation, better enabling the social direction of human biological evolution. If American eugenics declined under the weight of its political, demographic and scientific liabilities, the eugenic dream did not.

Conclusion

Today, genetic screening and sex selection are commonplace, and some call the contemporary applications of human genomic knowledge a new eugenics. But contemporary eugenics, if we may use this term, differs from its Progressive Era antecedent in two important ways. First, a better understanding of the mechanisms of inheritance has undermined the putative biological significance of race and class. The casual identification of race or class with inherited debility still exists, but it is far less pervasive today. Second, modern eugenics (exceptions like China to

one side) vests the power to select with families, not with the state. In today's "free market" in eugenics, experts advise but do not compel.[8]

This last matter—who shall decide, individual or state?—is central to the history of eugenics, as it is to the history of economics. For example, even progressives who condemned the identification of race with biological inferiority could remain committed to the idea of eugenic selection, and to the idea that the state, not "nature," should select the fittest.

Gunnar Myrdal wrote in *The American Dilemma* (1944), his influential study of race relations, "A handful of social and biological scientists over the last 50 years have gradually forced informed people to give up some of the more blatant of our biological errors. But there still must be other countless errors of the same sort that no living man can yet detect, because of the fog within which our type of Western culture envelops us" (cited in Gould, 1981, p. 23). Myrdal knew whereof he spoke: he and his wife, Alva, were eugenicists who promoted an expansion of Swedish eugenic sterilization laws during and after World War II. More than 60,000 Swedes, over 90 percent of them women, were sterilized from 1941 to 1975 (Broberg and Tydén, 1996, pp. 109–110). The Myrdals' eugenics disavowed racism, but because it was deemed "part of the scientifically oriented planning of the new welfare state" (Kevles, 1999), they did not see sterilization of the unfit as a "biological error."

The hubris of Progressive Era eugenics was twofold. First, the naïve faith that science would prove a cure-all for social ills, which led to overreaching by eugenicists and those social scientists who appealed their authority, and second, the naïve faith that the state, as guided by experts, would prove to be the best guarantor of human biological progress, a faith Myrdal (1944, p. 1024) avowed in his valedictory to *The American Dilemma*: "We have today in social science a greater faith in the improvability of man and society than we have ever had since the Enlightenment."

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[8] These important differences have lead some, such as James Watson (1996), codiscoverer of the structure of DNA, to endorse eugenics, when free of bias and of state compulsion.

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